

## CLAIMS

1. Apparatus for evaluating platelet functionality of a blood sample, comprising a cartridge having a plurality of test cells, each said cell adapted for receiving an aliquot part of said sample, a measured amount of clotting reagent in each said cell, and a measured amount of platelet activation reagent in each said cell, the amount of such reagent in each said cell differing from the amount of such reagent in each other cell, whereby the relative clotting times of said samples in said cells are determinative of the platelet functionality of said sample.

2. An apparatus as defined in claim 1 wherein said platelet activation reagent is 1-O-alkyl-2-acetyl-sn-glyceryl-3-phosphorylcholine.

3. An apparatus as defined in claim 1 wherein said platelet activation reagent is selected from the group consisting of 1-O-alkyl-2-acetyl-sn-glyceryl-3-phosphorylcholine, collagen, epinephrine, ristocetin.

*Sub AS* 4. A method for determining platelet functionality in a blood sample comprising dividing said sample into a plurality of aliquot samples, performing a clotting test on each aliquot sample in the presence of a selected amount of a platelet activation reagent, the selected amount of platelet activation reagent for each aliquot sample being different one from another, and determining platelet functionality based on the difference in clotting times for each said aliquot sample.

5. A method as defined in claim 4 wherein said platelet activation reagent is 1-O-alkyl-2-acetyl-sn-glyceryl-3-phosphorylcholine.

6. A method as defined in claim 4 wherein said platelet activation reagent is selected from the group

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consisting of 1-O-alkyl-2-acetyl-sn-glycerol-3-phosphorylcholine, collagen, epinephrine, ristocetin.

7. Apparatus for evaluating clotting characteristics of a blood sample, comprising a cartridge having a plurality of test cells, each said cell adapted for receiving an aliquot of said sample, a measured amount of clotting reagent in each said cell, and a measured amount of a clotting affecting reagent in each said cell, the amount of such reagent in each said cell differing from the amount of such reagent in each other cell, whereby the relative clotting times of said samples in said cells are determinative of clotting characteristics of said sample.

Sub A6 8. A method for determining clotting characteristics of a blood sample, comprising dividing said sample into a plurality of aliquot samples, performing a clotting test on each aliquot sample in the presence of a selected amount of a clotting affecting reagent, the selected amount of reagent for each aliquot sample being different one from another, and determining clotting characteristics based on the difference in clotting times for each said aliquot sample.

9. An apparatus as defined in claim 7 wherein said clotting affecting reagent is a platelet activator.

Sub A7  
Add A8 10. A method as defined in claim 8 wherein said clotting affecting reagent is a platelet activator.